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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,658	07/24/2003	Kunihiro Kishida	240691US2	8911
22850	7590	05/31/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			SCHINDLER, DAVID M	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			2862	

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,658

Applicant(s)

KISHIDA, KUNIHIO

Examiner

David Schindler

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Bot Ledynh
Primary Examiner

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/06/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Please note that the pages and lines cited for reference EP 0927674A1 are from the translation that was provided by applicant.

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

2. Claims 2, 3, and 4 are objected to because of the following informalities:

As to Claim 2,

The phrase "the time when the mobile has passed between the two magnetic members" on lines 8-9 lacks antecedent basis.

As to Claim 3,

The phrase "the time when the mobile has passed over a place having the magnetic members" on lines 5-6 lacks antecedent basis.

As to Claim 4,

The phrase "the straight line direction" on line 6 lacks antecedent basis

Appropriate correction is required.

3. Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). For the purposes of examination, Examiner has assumed that Claim 4 is dependent on Claim 1.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnard (GB 2222902A).

As to Claim 1,

Barnard discloses a plurality of magnetic members (19) arranged in a predetermined arrangement pattern whereby an installation place can be discriminated (Figure 2), and a mobile (11) that has magnetic sensors (15) capable of detecting external magnetic fields of the magnetic members and passes over a place having the magnetic members installed therein (Page 6, Lines 17-22), wherein when the mobile has passed over a place having the magnetic members installed therein (Figure 2), the place having the magnetic members installed therein over which the mobile has passed

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is discriminated on the basis of an arrangement pattern obtained from external magnetic fields of the magnetic members detected by the magnetic sensors ((Figures 2 and 3) and (Page 5, Lines 1-7)).

As to Claim 3,

Barnard discloses the mobile further includes a clock unit (Figure 2), and a storage unit for storing information capable of identifying the mobile ((Figures 2 and 3) and (Page 1, Lines 1-6) and (Page 6, Lines 8-10)), passing time of the mobile at the time when the mobile has passed over a place having the magnetic members installed therein is determined on the basis of time information supplied from the clock unit ((Figure 3) and (Page 5, Lines 1-9)), and the mobile that has passed over the place having the magnetic members installed therein is identified on the basis of information stored in the storage unit ((Page 1, Lines 1-5) and (Page 6, Lines 8-10) and (Figure 2) and (Page 6, Lines 17-22)).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard (GB 2222902A).

Barnard discloses the arrangement pattern of the magnetic members

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(19) includes two magnetic members (Figure 2) installed being spaced from each other in a travel direction of the mobile (11) by a predetermined distance ((Figure 2) and (Page 6, Lines 17-22)), detecting the transitions between spaces and plates and then determining the time between transitions, and the time between transitions clearly depends upon the velocity (speed) of the train ((Page 5, Lines 1-7) and (Figures 2 and 3) and (Page 6, Lines 17-19)).

Barnard does not explicitly disclose when the mobile has passed over a place having the magnetic members installed therein, a passing velocity of the mobile at the time when the mobile has passed between the two magnetic members is determined on the basis of a time interval at which the magnetic sensors detect external magnetic fields of the two magnetic members.

However, given the above disclosure by Barnard, especially the disclosure that the time between transitions clearly depends upon the speed of the train, it would have been obvious at the time of the invention to modify Barnard to include the mobile has passed over a place having the magnetic members installed therein, a passing velocity of the mobile at the time when the mobile has passed between the two magnetic members is determined on the basis of a time interval at which the magnetic sensors detect external magnetic fields of the two magnetic members in order to better determine the time between the transitions plates and spaces.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard (GB 2222902A) in view of Strunk (EP 0927674 A1).

Barnard discloses as explained above.

Barnard does not disclose each of the magnetic members includes a plurality of magnets arranged in a straight line, and the magnets are installed so as to direct predetermined same polarities in a predetermined direction generally perpendicular to the straight line direction in which the magnets are arranged so as to be adjacent to each other.

Masch et al. discloses each of the magnetic members (1) includes a plurality of magnets arranged in a straight line (Figure 1), and the magnets are installed so as to direct predetermined same polarities in a predetermined direction generally perpendicular to the straight line direction in which the magnets are arranged so as to be adjacent to each other ((Figure 1) and (Page 4, Lines 23-24)).

It would have been obvious at the time of the invention to modify Barnard to include each of the magnetic members includes a plurality of magnets arranged in a straight line, and the magnets are installed so as to direct predetermined same polarities in a predetermined direction generally perpendicular to the straight line direction in which the magnets are arranged so as to be adjacent to each other as taught by Masch et al. in order to determine the position of the vehicle accurately and in a simple manner ((Page 3, Lines 46-49) and (Page 4, Lines 1-5)).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. No. 4,236,093 to Birnbaum which discloses detecting the direction and velocity of a moving ferromagnetic element..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Schindler whose telephone number is (571) 272-2112. The examiner can normally be reached on M-F (8:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Schindler



Bot Ledynh
Primary Examiner